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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/010,907	11/02/2001	David Schaible	541.1029US2	6133

23280 7590 09/28/2004

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EXAMINER

HALPERN, MARK

ART UNIT PAPER NUMBER

1731

DATE MAILED: 09/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/010,907	SCHAIBLE ET AL.	
	Examiner	Art Unit	
	Mark Halpern	1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- 1) The application is withdrawn from issue. See the 9/21/2004 paper issued by the Director under a separate cover. The application is being forwarded to the examiner for action.
- 2) Acknowledgement is made of Amendment received 5/27/2004. Applicants amend claim 28.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

- 3) Claims 1-28, are rejected under 35 U.S.C. 102(a) as being anticipated by Jollez et al. (US 2002/0084044).

Claims 1, 11-12, 17: Jollez discloses a process for making high grade, pharmaceutical grade microcrystalline cellulose [0089] to [0097]. The process includes the following steps: (a) preparation of a pulp by repulping, (b) pressing of the pulp obtained in (a), (c) decompaction of the pulp obtained in (b), (d) feeding of the pulp obtained in (c) into a pre-heated reactor, (e) cooking of the pulp at a temperature, a time and a pressure allowing to obtain a pulp having a desired degree of polymerization, (f) cooling and partial controlled depressurization of the reactor by purging the reactor,

followed by water injection into the jacket and directly into the reactor, (g) filtering the pulp obtained in (f), (h) bleaching of the pulp obtained in (g), and (i) drying the pulp obtained in (h). The cooked pulp is hydrolyzed cellulose. The process takes place without the use of mineral acids or sulphur dioxide, and in the absence of a violent non-selective depressurization [0006], [0007]. The process allows the application of a controlled depressurization in step (f), which in turn allows to keep the natural texture of the fibers and obtain a cellulose having a low degree of polymerization (Abstract, col. 2, paragraph [0029] to [0040]. Deaggregating the hydrolyzed cellulose takes place by the application of a shear force [0117].

Claims 2-3, 6: deaggregating the hydrolyzed cellulose takes place by the application of a shear force [0117] in a colloidal mill [0086], where water is added.

Claim 4: drying occurs in a spray dryer [0087].

Claims 5, 24-26: neutralization of the solution takes place prior to deaggregation to a pH of a range between 5.5 and 7 [0086].

Claims 7, 13: repulping is performed at a consistency of 2-3 % [0058].

Claims 8, 14: antioxidants are added during the cooking step [0049] to [0056].

Claims 9, 15: cooking temperature is disclosed between 200 and 235 °C [0062].

Claims 10, 16: cooking time is disclosed between 4 and 25 minutes [0064].

Claims 18-23: bleaching is performed using peroxide, magnesium sulphate and sodium hydroxide, or a mixture thereof. Bleaching occurs at a temperature ranging between 60 and 120 °C, and at an air pressure of 120 psi (pg. 7, claims 9-11).

Claims 27-28: the desired degree of polymerization is a stable degree of polymerization [0064].

Response to Amendment

- 4) Claim 28 objection to under 37 CFR 1.75(c), is withdrawn in view of the amended claim.
- 5) Claims 1-3, 5-28, rejection under 35 U.S.C. 103(a) as being unpatentable over Jollez (WO 99/60027) in view of Toshkov (3,954,727), and further in view of Gross (6,344,109), is withdrawn in view of further search of art in prior art.
- 6) Claim 4 rejection under 35 U.S.C. 103(a) as being unpatentable over Jollez in view of Toshkov, further in view Gross, and further in view of Hanna (6,228,213), is withdrawn in view of further search of art in prior art.
- 7) Applicant's arguments with respect to claims 1-28, have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

- 8) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Halpern whose telephone number is 571-272-1190. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1731

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Mark Halpern